

REMARKS

Claims 1-2, 6-7, 12, and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deans et al. in view of Riess et al. The Examiner states that Deans et al. shows the method of lap splicing first and second lengths of photographic film strips comprising overlapping the ends of the film strips and applying ultrasonic energy to bond the overlapped sections, and that Riess et al. shows a method of bonding two articles to each other by positioning a bonding element between the two articles wherein the bonding element comprises an induction heating receptive support, 860, with adhesive layers, 862, 864, on each side of the support and wherein the heating of the bonding element is performed by induction heating (column 6, lines 52-62; column 43, lines 22-35). The Examiner further states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the bonding element of Riess et al. in place of the ultrasonic welding of Deans et al. for the advantages shown by Riess et al., in particular the reversibility which would not be possible with an ultrasonic bond. This rejection is respectfully traversed.

As noted by the Examiner, Deans et al. is specifically directed towards splicing of photographic film strips by application of ultrasonic energy, and fails to teach or suggest the use of induction heating bonding elements for photographic film splicing. Riess et al., on the other hand, does teach the use of induction heating bonding elements for bonding two articles to each other, but fails to teach or suggest the use of such bonding elements for use in splicing of photographic film strips. Contrary to the Examiner's assertions, it would not have been obvious to combine the teachings of Deans et al. and Riess et al. to arrive at the present claimed invention.

First, sealing films ultrasonically as taught by Riess has the specific feature of avoiding the need for additional splicing materials (such as splicing tape as set forth at col. 1, lines 42-43 of Riess et al.). Thus, substitution of the use of a bonding element as taught by Riess et al. for the ultrasonic welding as taught by Deans et al. would defeat at least one of the purposes of the process employed by Deans et al., and accordingly would not have been prima facie obvious for the artisan to do so.

Further, there is no teaching or suggestion that the bonding elements of Riess et al. would be successful when employed for photographic

film splicing. To the contrary, the applications specifically envisioned by Riess et al. (generally, millwork bonding applications as suggested at col. 10, line 52, and more specifically the bonding of trim to wallboard as stated at col. 1, line 19) generally employ the bonding element over substantially larger bonding areas than would be employed in a photographic film splicing application. There is no teaching or suggestion that such induction heating bonding elements would enable splices of effective peel strength and tensile strength when employed over substantially smaller bonding areas as would be used for photographic film strip splicing.

As Riess et al. fails to teach or suggest the use of their bonding elements for applications involving relatively small bonding areas such as for splicing of photographic film, and as the substitution of such bonding means for the ultrasonic bonding process of Deans et al. would actually eliminate an advantage of such system as taught by Deans et al., it is clear that the present invention would not have been prima facie obvious to the artisan, and that the proposed obviousness rejection rather is arrived at only through the improper use of hindsight by the Examiner.

In accordance with such distinctions, and to more specifically claim the present invention, claim 1 has been cancelled and claim 2 has been rewritten in independent form, along with incorporation of the features of dependent claim 19 (which has also accordingly been cancelled). As presently set forth, independent claim 2 is thus directed towards a method for splicing overlapping ends of first and second lengths of motion picture film strips of specified width (8 to 70 mm), employing an induction heating bonding element of specified size (0.5 to 3 mm in width and from 8 to 70 mm in length) and thickness (less than or equal to about 200 μ m) positioned across the film strip width, in an area between imaged scene frame areas of the motion picture films, where the peel strength of the resulting prepared splice exceeds 1.0 kg/35mm width and the tensile strength of the resulting prepared splice exceeds 18 kg/35mm width. As indicated at page 7, lines 12-18 of the specification, the present claimed invention enables the effective splicing of motion picture film strips without having the splice area negatively effect the imaged scene areas.

The Examiner alleges that it would have been obvious to use a bonding element in the claimed dimensions because these dimensions are

equivalent to the splicing area, and that the bond strength of the references as combined would be expected to be equivalent to the bond strength of the instant invention because both use the same bonding technology. As noted above, however, the induction heating bonding areas typically employed in the actual applications proposed by Riess et al. (i.e., millwork) would be substantially larger than those set forth in the current claim. As the prior art fails to teach or suggest that effective photographic film strip splices having the specified peel strength and tensile strength may be obtained with the relatively small area induction heating bonding elements specified in the present invention, it is believed the invention as set forth in present claim 2 is non-obvious and patentable over the applied prior art. The dependent claims additionally rejected over Deans et al. in view of Riess et al. are believed to be patentable for at least the same reasons as claim 2. Reconsideration of this rejection is accordingly respectfully requested.

Claims 3-5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deans et al. in view of Riess et al. as applied to claim 1 above, and further in view of Holzer et al. While Riess et al. is silent as to the thickness of the adhesives employed on either side of the receptive support, the Examiner states that Holzer et al. teaches that the thickness of the adhesive on either side of a receptive support is dependent upon the material being bonded but that for smooth surfaces a thickness of 1 to 3 mils (25-75 microns) (see paragraph 0033), and that with the thinnest adhesive suggest by Holzer et al. the thickness of the bonding element would be about 50 microns. The Examiner further states that it is well known that thinner adhesives are stronger than thicker ones, and that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use even thinner adhesive layers than that shown by Holzer et al. on smooth articles to increase bonding strength. This rejection is respectfully traversed.

Similarly as with Riess et al. discussed above, Holzer et al. is directed towards applications involving the use of induction heating bonding over relatively large areas (specifically, high pressure laminates for use, e.g., in the furniture and construction industries, the signage or display industry, or elsewhere, as stated in paragraph [0003]) in comparison to the relatively small bonding areas employed in the present invention, and there is no teaching or

suggestion that the induction heating bonding elements employed therein would be effective for use in photographic film splicing bonding elements in accordance with the present invention. Further, Holzer et al. in any event does not teach separate induction heating bonding elements themselves of any particular thickness, but rather thicknesses of component layers of induction bondable high-pressure laminates (i.e., the susceptor element thereof is pre-bonded to a high-pressure laminate element, such that the combination thereof is bondable to a substrate). Accordingly, the further combination of Holzer et al. with Deans et al. and Riess et al. still fails to teach or suggest the present claimed invention.

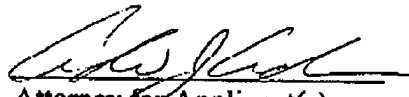
Additionally with respect to claims 10 and 11, the Examiner states that the particular nature of the adhesive employed, its composition, and/or physical properties would have been obvious to one having ordinary skill in the art based upon considerations of cost, availability, bond strength, mode of application or environmental preference, and that typically, selection of the proper adhesive may be achieved in the course of routine experimentation, by reference to standard technical literature, or through consultation with industrial or specialty adhesive suppliers. The Examiner fails to provide any evidence of publicly available information which would suggest, and lead one skilled in the art to use of preformed adhesive films meeting the specified physical properties. It is only the present Applicants who have demonstrated (as in Examples 4 and 5) such materials perform advantageously in the specific application of the present invention relative to materials not meeting such physical requirements. A prima facie case of obvious accordingly clearly has not been established.

Claim 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deans et al. in view of Riess et al. as applied to claim 1 above, and further in view of the admitted prior art. The Examiner states that the instant specification indicates that induction heating technology uses either a metal foil or a vacuum deposited metal layer on a polymeric film (page 5, lines 14-19), and that it would have been obvious to one of ordinary skill in the art at the time the invention was made to replace the metal foil of the method of the references as combined above with a metal coated polymeric film because the admitted prior art shows these to be interchangeable. This rejection is respectfully traversed.

Page 5, lines 14-19 of the present specification refers to induction heating technology as applied in food packaging and lidding material applications, and notes that these applications typically employ a heat-sealable thermoplastic adhesive layer on one side of a metal foil or metal coated (vacuum deposited) polymeric web. Such food packaging and lidding applications involve the use of induction heating bonding over relatively large areas in comparison to the relatively small bonding areas employed in the present invention, and there is no teaching or suggestion that the induction heating bonding elements employed in such applications would be effective for use in photographic film splicing bonding elements in accordance with the present invention. Accordingly, the further combination of the referenced "admitted prior art" with Deaus et al. and Riess et al. still fails to teach or suggest the present claimed invention.

In view of the foregoing amendments and remarks, reconsideration of this patent application is respectfully requested. A prompt and favorable action by the Examiner is earnestly solicited. Should the Examiner believe any remaining issues may be resolved via a telephone interview, the Examiner is encouraged to contact Applicants' representative at the number below to discuss such issues.

Respectfully submitted,



Attorney for Applicant(s)
Registration No. 33,564

Andrew J. Anderson/vjr
Rochester, NY 14650
Telephone: (585) 722-9662
Facsimile: (585) 477-1148